The Impact of the Safe Kids/Healthy Neighborhoods Injury Prevention Program in Harlem, 1988 through 1991

ABSTRACT

Objectives. This study evaluated the effectiveness of a community coalition to prevent severe injuries to children in Central Harlem, New York, NY. It was hypothesized that injury incidence rates would decline during the intervention (1989 through 1991) relative to preintervention years (1983 through 1988); that the decline would be greatest for the targeted age group (5 through 16 years) and targeted injury causes (traffic accidents, assaults, firearms, outdoor falls); and that the decline would occur in the intervention community rather than a control community.

Methods. Surveillance of injuries that result in hospitalization and/or death among children in the two communities has been under way since 1983. Data from this surveillance were used to test whether the incidence of severe injury declined during the intervention; other temporal variations were controlled by Poisson regression.

Results. The incidence of injury among school-aged children in central Harlem declined during the intervention. The decline was specific to the targeted age group and targeted causes. A nonspecific decline also occurred in the control community.

Conclusions. The declining incidence rate in Central Harlem is consistent with a favorable program effect, but additional investigation of possible secular trend or spillover effects is needed. (*Am J Public Health.* 1994;84:580–586)

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Introduction

Injury prevention has become a major public health goal in the United States[1] and community-based programs are widely recommended as a key strategy for the prevention of injuries,[2–4] but such programs are seldom evaluated rigorously. Because of variations in patterns of injury rates among communities, local surveillance systems must not only provide direction for the development of community-based programs but must also monitor and evaluate these programs.[4,5] In this report we present an evaluation of the effects on the incidence of severe injury of a community-based program, the Safe Kids/Healthy Neighborhoods Coalition, in Central Harlem, New York City.

Central Harlem health district is a disadvantaged community in New York City with a predominantly non-Hispanic Black population. It is contiguous to Washington Heights health district, a largely Hispanic community, which is slightly less disadvantaged. In 1990, 39.5% of Central Harlem residents lived below the poverty level, compared with 30.7% of Washington Heights residents and 19.3% of city residents as a whole (Table 1). Together the two communities, which constitute Northern Manhattan, contain 5.9% of New York City residents younger than 17 years.

The Northern Manhattan Injury Surveillance System (NMISS) was established at the two major hospitals serving these communities covering the years from 1983 onward. This system monitors the incidence of severe pediatric injuries (defined as those resulting in hospitalization or death). Preintervention surveillance data for the years 1983 through 1987 revealed three patterns: (1) the incidence of severe injuries was twice as high in Central Harlem as in Washington Heights; (2) the incidence was increasing among school-aged children (those aged 5 through 16 years) while declining among younger children (newborn through 4 years); and (3) the leading causes of severe injuries were falls and motor vehicle collisions. Assault was the cause of 9% of injury hospitalizations and 36% of injury deaths. Gunshot wounds were a major cause of fatal injuries (14%) to children in Harlem[6] and in New York City as a whole.[7]

Safe Kids/Healthy Neighborhoods Coalition

Parents and educators in Central Harlem requested a program in playground safety from health professionals. Surveys of the playgrounds revealed that they were sites for drug dealing and were in poor repair. Children in these play areas had very little adult supervision. The absence of safe play areas and

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supervised play activities for children was hypothesized to contribute to the high rates of outdoor injuries and assaults found among children in Harlem.

On the basis of these observations, at the end of 1988 the Harlem Hospital Injury Prevention Program, in collaboration with a variety of community groups and city agencies, initiated the Safe Kids/Healthy Neighborhoods Coalition, the initial goal of which was to reduce outdoor injuries. The Coalition soon grew to include assaults to school-aged children and developed alliances with city and community agencies and the private sector. Specifically, the Coalition worked to (1) renovate Central Harlem playgrounds; (2) involve children and adolescents in safe, supervised activities that would teach them useful skills (dance, art, sports, horticulture, carpentry); (3) provide injury and violence prevention education; and (4) provide safety equipment (bicycle helmets) at reasonable cost.

The development of the Safe Kids/Healthy Neighborhoods injury prevention program is described more fully elsewhere.[9] Over the first 3 years (1989 through 1991), 26 organizations (departments of city agencies, voluntary organizations, citizen groups) participated in the intervention. (Participation is defined as attending two or more planning meetings in any 1 year.) Injury prevention programs and activities were developed steadily over the period and involved large numbers of community children. The Department of Parks undertook repair of all playgrounds, including major capital improvements to five parks and playgrounds, and involved over 100 children in mural painting (three murals were completed). The Department of Transportation initiated an intensive pedestrian safety program that has reached all third-grade pupils in Harlem since 1990; the department has conducted other traffic safety education as well. The Harlem Hospital Injury Prevention Program initiated a dance program, an art studio, a Little League program, a winter baseball clinic, and a soccer league that have involved over 1000 children. Through bicycle safety programs, more than 500 bicycle helmets have been made available to the community.

TABLE 1—Demographic Characteristics of Central Harlem, Washington Heights, and New York City

	Central Harlem	Washington Heights	New York City
No. children aged <17 y			
1980	26 818	57 637	...
1990	28 457	66 305	...
Change, %	+5.8	+13.1	...
No. children aged <5 y			
1980	6 945	19 141	...
1990	9 203	21 770	...
Change, %	+24.5	+12.1	...
No. children aged 5–16 y			
1980	19 873	38 498	...
1990	19 254	44 535	...
Change, %	−3.2	+13.6	...
From 1990 census			
Non-Hispanic Black, %	87.6	18.8	25.2
Hispanic, %	10.2	63.4	24.4
Non-Hispanic White, %	1.4	15.1	43.2
Below poverty level, %	39.5	30.7	19.3
Receiving public assistance, %	29.6	23.7	13.1
Living two or more persons per room, %	1.6	3.5	1.8

Source. Data are from the 1980 and 1990 US censuses.[11,12]

Methods

Injury Hospitalizations and Deaths

Severe injury is defined as an injury resulting in hospitalization and/or death and refers to the *International Classification of Diseases* (ninth revision) external cause of injury codes (E-codes) between 800 and 999, which incorporate all trauma, poisonings, and burns that result from intentional, unintentional, and undetermined external causes.[10] Complications of hospitalization (E870–879) and therapeutic overdose (E930–949) are excluded from the definition. The study was restricted to residents of Northern Manhattan younger than age 17 (the criterion for admission to pediatric wards at one of the study hospitals) who were injured during the years 1983 through 1991.

Injury data for hospitalized cases were abstracted from the medical records of the two primary hospitals serving the area. Over the 9 years of the study, the data were abstracted by two physicians and a graduate student trained by an injury epidemiologist and pediatric surgeon. E-codes abstracted from the medical records were compared with E-codes on the discharge summary. Discrepancies were resolved in consultation with the injury epidemiologist. Pilot studies of data abstraction procedures showed high agreement between reviewers and data were routinely checked for accuracy.

Data on fatal injuries were obtained from New York City death certificate files. Reported deaths that occurred following admission to one of the two hospitals were verified in the data from the hospital records. The injury deaths among children who lived in the study area but who had not been admitted to one of the study hospitals were added. NMISS consists of the injury hospitalization and death data collected in this manner.

Adjustment for Incomplete Study Hospital Coverage

A comparison between NMISS data and the New York State Uniform Hospital Discharge Data (UHDD) revealed that 76% of all child residents of Northern Manhattan hospitalized for injury were admitted to one of the two study hospitals during the years 1983 through 1988. Since UHDD did not include the cause of injury until 1990, UHDD could not be used for the analysis directly. Instead, UHDD were used to adjust the incidence rates to compensate for the degree to which the data from the two hospitals underestimate the true incidence. This was done in the following manner. Within UHDD, the proportion of all injury-related hospitalizations in the study population admitted to one of the two study hospitals was calculated separately for each health district and for each year. Injury incidence in NMISS was adjusted by this proportion in each area and each year

TABLE 2—Numbers of Injuries and Mean Annual Adjusted Incidence Rates for All Causes of Severe Injury, by Age Group and Area

	Central Harlem		Washington Heights	
	Newborn–4 y	5–16 y	Newborn–4 y	5–16 y
No. injuries (1983–1991)				
Nonfatal	680	1217	975	1516
Fatal	29	37	34	14
Mean annual adjusted incidence rates[a]				
All severe injuries (1983–1991)	1251	968	611	468
Injury mortality (1983–1991)	37.9	21.2	17.6	11.4
All severe injuries, preintervention (1983–1988)	1382	1035	655	509
All severe injuries, intervention period (1989–1991)	989	833	523	387

[a]Adjusted rates (per 100 000 population) were calculated with numerators from the Northern Manhattan Injury Surveillance System, adjusted by the proportion estimated from Uniform Hospital Discharge Data to be hospitalized in other hospitals, and weighted averages of the population from the 1980 and 1990 US censuses.

separately. In 1989, 1990, and 1991 an average proportion for the preceding 6 years was substituted because UHDD for those years were found to be incomplete. The adjustment assumes that the cases treated in hospitals other than the two study hospitals were distributed by external cause in the same way as those in the database from the two hospitals. A comparison of the age, sex, racial, and broad diagnostic distributions of cases in the two data sets for 1983 through 1988, when UHDD were complete, show no major differences and suggest that this assumption is valid.[6] Distribution by E-code could not be compared because this information was not included in UHDD until the end of the study period.

Population Denominators

The US census (1980 and 1990) provided the population denominators for the two areas and two age groups (newborn through 4 years and 5 through 16 years).[11,12] A weighted average for each intercensus year was calculated for each area and age group. For example, the population estimate for the Central Harlem 0- through 4-year-old age group in 1984 was estimated as 60% of the 1980 count plus 40% of the 1990 count for the same area and age group.

Table 1 summarizes the demographic characteristics of the two communities from the 1980 and 1990 censuses. Substantial increases in the population occurred in Central Harlem in the younger age group and in Washington Heights in both age groups. Increases in birth rates in the two health districts during the past decade corroborate these census figures. Between 1980 and 1990, no striking changes occurred in the composition of the two health districts with respect to ethnic and economic indicators.

Statistical Analysis

The study design involves comparisons between the incidence rates of severe injuries during the intervention period (1989 through 1991) and those during the preintervention period (1983 through 1988). Three sets of comparisons are presented: (1) 5- through 16-year-old children vs newborn through 4-year-old children in Central Harlem (i.e., the rates in the targeted age group are compared with those in the nontargeted age group within the area in which the program was implemented); (2) 5- through 16-year-old children in Central Harlem vs children of the same age in Washington Heights (i.e., the rates in the area in which the program was implemented are compared with those in the neighboring community in which no specific injury prevention had occurred within the targeted age group); and (3) targeted vs nontargeted injuries among 5- through 16-year-old children in Central Harlem and in Washington Heights. Targeted injuries included all injuries related to vehicles, outdoor falls, assaults, and guns, regardless of intent. Nontargeted injuries included all others (poisonings, ingestions, burns, etc.). The three comparisons are used to strengthen inferences about the effect of the intervention by replicating the findings using different approaches to the data.

Incidence rates (adjusted as described above) for all injuries and for targeted and nontargeted injuries separately were calculated in 36 quarterly (3-month) intervals over the 9-year period for each age category (5 through 16 years and newborn through 4 years) and each area (Central Harlem and Washington Heights). Date of death or admission was used to indicate the quarter in which the injury occurred. Each case was assigned to a census tract, and therefore to either the Central Harlem or the Washington Heights health district, on the basis of the child's residential address.

The method of Poisson regression was used. The dependent variable was the injury rate in each quarter, which was modeled as a function of year (coded as a continuous variable), to account for net secular trends; season (coded as a four-way categorical variable), to account for marked increases in injury in the summer quarter; and intervention period (coded as a categorical variable corresponding to the time period before and after the development of the intervention). Poisson regression models can be understood as a subclass of generalized linear models in which the distribution of the error is assumed to be Poisson, the systematic effects are multiplicative, and the link function is log linear.[13–18] In each age and area category separately, Poisson regression models for rates of all injury and targeted and nontargeted injury types were fitted by means of maximum likelihood estimation and the statistical package GLIM.[19]

Poisson regression models have the useful feature of allowing the regression parameters to be interpreted as the log of the relative risk, adjusted for the other predictors in the model. In this case, the log of the regression parameter for the intervention period indicated the relative risk of injury following the intervention to that before the intervention, with annual and seasonal variations in injury incidence controlled. If, for example, incidence rates were decreasing prior to the intervention, then only if the decrease in the injury rate following the intervention was greater than this antecedent secular trend would the relative risk from the regression model indicate some protective effect of the intervention.

Results

Descriptive Epidemiology

Rates of severe injury hospitalization and mortality in the study population over the 9-year period of surveillance are displayed in Table 2 by age group and area. The injury rates for all severe injuries were approximately twice as high in Central Harlem as in Washington Heights for both age groups and declined for both areas and age groups over time.

Time Trends and Poisson Regression Analysis

Central Harlem: Comparison of incidence rates for the targeted and nontargeted age groups. The adjusted annual incidence rates of injuries in Central Harlem are plotted in Figure 1 for the two age groups. The rates can be seen to vary widely from year to year and appear to be decreasing over time in both age groups.

Poisson regression results show a significant decrease during the intervention period in the targeted age group (relative risk [RR] = 0.74, 95% confidence interval [CI] = 0.62, 0.89; Table 3). The intervention period is thus associated with a 26% reduction in the overall injury rate during the 3 years after the initiation of the prevention program compared with the 6 years before. In the younger, nontargeted age group, by contrast, no significant reduction in incidence occurred (RR = 1.06, 95% CI = 0.83, 1.35; Table 3). These relative risks are adjusted for annual and seasonal trends independent of the intervention. The model for children aged 5 through 16 years incorporates a marked seasonal effect but no significant annual trend. For younger children, seasonal trends are less consistent but the coefficient for annual trend is significant, reflecting a decrease in incidence with each sequential year.

School-aged children: Comparison of incidence rates for the targeted and nontargeted areas. The adjusted annual rates of injury from all causes in Central Harlem and Washington Heights for the age category 5 through 16 years are displayed in Figure 2. There appears to be a reduction in both areas in the last 3 years in this age category. The rates are substantially higher in Central Harlem than in Washington Heights in all years. Both areas show variability from year to year. The regression models show a

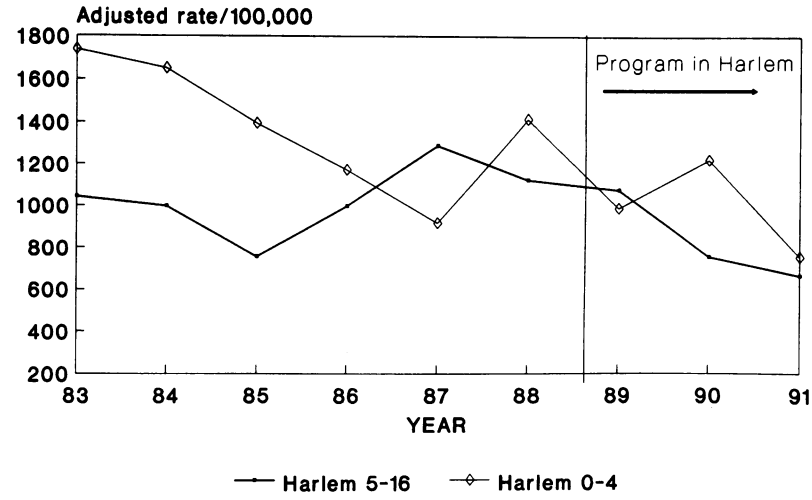


FIGURE 1—Adjusted annual rates per 100 000 population for all injuries in Central Harlem to children newborn through 4 years and 5 through 16 years.

TABLE 3—Results of Poisson Regression Models for Adjusted[a] Rates of All Injury Types: Effect of Intervention Period, with Year and Season Controlled

Model	β	SE (β)	*P*	Relative Risk	95% Confidence Interval
Central Harlem, children aged 5–16 y					
Year	0.02	0.016	.211		
Season					
2nd quarter	0.41	0.070	<.001		
3rd quarter	0.42	0.070	<.001		
4th quarter	−0.037	0.077	.631		
Intervention period	−0.30	0.090	<.001	0.74	0.62, 0.89
Central Harlem, children newborn–4 y					
Year	−0.08	0.022	<.001		
Season					
2nd quarter	0.10	0.095	.294		
3rd quarter	0.25	0.092	.007		
4th quarter	0.13	0.095	.171		
Intervention period	0.056	0.123	.460	1.06	0.83, 1.35
Washington Heights, children aged 5–16 y					
Year	0.019	0.016	.234		
Season					
2nd quarter	0.37	0.066	<.001		
3rd quarter	0.30	0.067	<.001		
4th quarter	−0.22	0.076	.004		
Intervention period	−0.36	0.087	<.001	0.70	0.59, 0.83
Washington Heights, children newborn–4 y					
Year	−0.039	0.020	.047		
Season					
2nd quarter	0.004	0.083	.960		
3rd quarter	−0.02	0.083	.844		
4th quarter	−0.06	0.084	.449		
Intervention period	−0.05	0.111	.680	0.96	0.77, 1.19

[a]Adjusted rates (per 100 000 population) were calculated with numerators from the Northern Manhattan Injury Surveillance System, adjusted by the proportion estimated from Uniform Hospital Discharge Data to be hospitalized in other hospitals, and weighted averages of the population from the 1980 and 1990 US censuses.

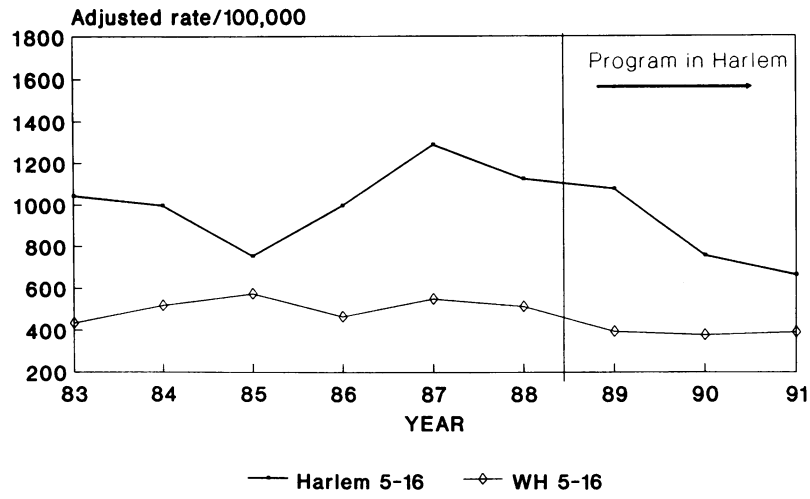
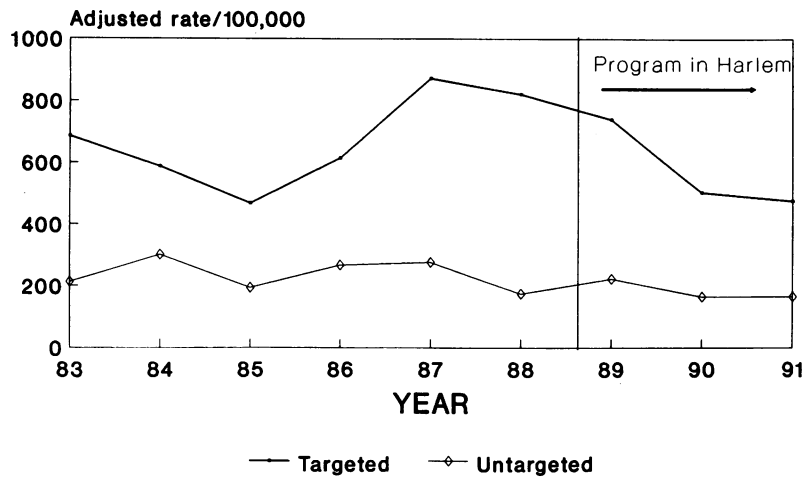


FIGURE 2—Adjusted annual rates per 100 000 population for all injuries in Central Harlem and Washington Heights (WH) to children aged 5 through 16 years.



Note. Targeted injuries are injuries related to motor vehicles, outdoor falls, guns, and assaults.

FIGURE 3—Adjusted annual rates per 100 000 population for targeted and nontargeted injuries in Central Harlem to children aged 5 through 16 years.

significant reduction for 5- through 16-year-olds in Washington Heights (RR = 0.70, 95% CI = 0.59, 0.83; Table 3). This reduction is slightly greater than the reduction observed in Central Harlem in the same age group. In the younger age group in Washington Heights, there is no significant reduction (RR = 0.96, 95% CI = 0.77, 1.19).

Central Harlem and Washington Heights: Comparison of incidence trends for targeted and nontargeted injuries. The adjusted annual incidence rates of targeted and nontargeted injuries among children aged 5 through 16 years in Central Harlem are displayed in Figure 3. The regression models show that in Central Harlem the decline during the intervention period is differential, affecting targeted injuries (RR = 0.56, 95% CI = 0.45, 0.71) but not other injuries (RR = 1.03, 95% CI = 0.78, 1.35; Table 4). Within the targeted injury category in Central Harlem, motor vehicle and assault injuries decreased significantly while outdoor falls did not. Figure 4 displays the adjusted annual incidence rates of targeted and nontargeted injuries among children aged 5 through 16 years in Washington Heights. In Washington Heights, the decline in incidence during the intervention period occurred only for motor vehicle injuries (Table 4).

Discussion

Few published evaluations of community-based injury prevention programs have used changes in injury rates as outcome measures. The Massachusetts statewide injury prevention program demonstrated a reduction in incidence in one of its targeted injury subtypes, motor vehicle occupant injuries.[20] In Sweden, a 4-year grassroots community-based injury prevention program showed postintervention decreases in home injuries (27%), occupational injuries (28%), and motor vehicle injuries (28%).[21] Both studies used a comparison between pre- and intraintervention injury rates in study and control communities. A study in the US Indian Health Service used regression analysis to demonstrate a program effect on changes in hospitalization rates for injury.[22]

This evaluation of the Harlem Safe Kids/Healthy Neighborhoods Coalition provides findings that are consistent with the hypothesized favorable effect of the program in reducing the incidence of severe injuries. It also produced findings that detract from the hypothesized effect. In favor of the hypothesis is the estimated 44% reduction in injury risk for targeted injuries in school-aged children in Central Harlem during the intervention period relative to the preintervention period. Moreover, the decrease within Central Harlem was specific to the age group (5 through 16 years) and largely specific to the injury types targeted by the prevention program. A finding not consistent with the study hypothesis is the significant decline in incidence also observed in the control area, Washington Heights (an estimated 30% reduction), for all severe injuries to school-aged children. The decline in Washington Heights occurred for both all targeted and all nontargeted causes, and, within the targeted category, it was restricted to motor vehicle injuries. Our conclusion from these mixed findings is that because the decline in incidence was specific to targeted injuries only in the intervention area, there is cause to be optimistic

about the effectiveness of the prevention program. At the same time, the significant reduction in motor vehicle injuries (one of the targeted causes) in both the intervention and control areas weakens the evidence in favor of the program's effectiveness in preventing this leading cause of injury.

The study also demonstrates the need for caution in using routinely collected hospitalization data for evaluation: had we used only the New York State UHDD for the follow-up period and not collected local surveillance data from hospital records, we would not have known that the UHDD were incomplete. This would have biased our results in favor of the hypothesis, for we would have found a spuriously low rate in the Harlem area compared with the Washington Heights area, for which the UHDD were more complete. The incomplete UHDD means that changes in referral patterns in the period since the intervention cannot be assessed. The adjustment makes the assumption that there were no such changes.

The observed decline in motor vehicle injuries, which for Northern Manhattan residents are predominantly pedestrian injuries, could be due to (1) a general decline in motor vehicle injuries, independent of any effects of the Safe Kids/Healthy Neighborhood Injury Prevention Program, or (2) a program effect that "spilled over" to the control area. In support of the first of these alternatives is a general national decline in motor vehicle death rates since 1989.[23] In support of the second alternative, preliminary data on the residence of program participants demonstrate that an increasingly large proportion (29%) of all participants in the program between 1989 and 1991 lived in Washington Heights. Further research is needed to investigate these hypotheses.

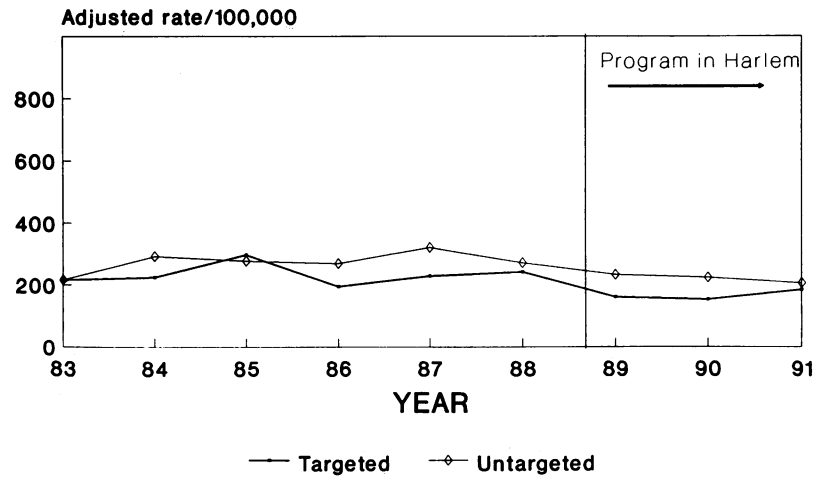
Another finding that is difficult to explain is the absence of a significant change in the incidence of outdoor fall injuries, a major cause of injury targeted by the program. One possible explanation for this finding is that the program activities are not effective in preventing outdoor fall injuries. The program contained no specific elements that addressed the problem of falls; rather, it focused on general improvements in environmental hazards (e.g., repair of dangerous fences and the provision of safer equipment) and increased supervision. The provision of many new supervised sports activities in the area may have actually resulted in an increased exposure to the risk of outdoor falls. Another possibility is that our ability to distinguish outdoor from indoor fall injuries was not adequate and that our measure of outdoor fall injuries was, therefore, not sufficiently valid to detect a change due to the intervention. The E-codes used to classify causes of injury do not always distinguish outdoor from indoor falls and data on location of injury event are incomplete. Cases for which the information was incomplete for classifying the location of falls were included in the untargeted group.

Despite these limitations, this study demonstrates the usefulness of injury surveillance both for guiding the development of a community-based and locally relevant injury prevention program and for evaluating the impact of such a program on injury incidence. In 1987, NMISS showed a dramatic increase in assault injuries and high rates of motor vehicle–pedestrian and fall injuries among school-age children in Central Harlem. It was these data that gave impetus and direction to the Safe Kids/Healthy Neighborhoods Injury Prevention Program in Central Harlem, initiated in 1988 and still active in 1993. The same surveillance system is providing the necessary data to evaluate the effects of the prevention program activities on the

TABLE 4—Effect of Intervention, with Year and Season Controlled, on Targeted and Nontargeted Adjusted Quarterly Injury Rates among Central Harlem and Washington Heights Children Aged 5 through 16 Years

	Central Harlem			Washington Heights		
	No.	RR	95% CI	No.	RR	95% CI
All targeted injuries[a]	664	0.56	0.45, 0.71	683	0.68	0.52, 0.87
Assault	199	0.52	0.34, 0.79	136	1.13	0.63, 2.03
Motor vehicle	302	0.45	0.32, 0.64	375	0.47	0.34, 0.66
Outdoor falls	121	1.35	0.75, 2.42	138	0.89	0.49, 1.54
Guns	100	0.56	0.31, 1.02	67	1.58	0.68, 3.66
All nontargeted injuries[b]	580	1.03	0.78, 1.35	833	0.71	0.57, 0.90

Note. RR = relative risk; CI = confidence interval.
[a]Targeted injuries include all assault injuries and all injuries related to motor vehicles, outdoor falls, and guns, regardless of intent.
[b]Nontargeted injuries include all unintentional nontrauma injuries and unintentional trauma injuries other than injuries related to motor vehicles, outdoor falls, and guns.



Note. Targeted injuries are injuries related to motor vehicles, outdoor falls, guns, and assaults.

FIGURE 4—Adjusted annual rates per 100 000 population for targeted and nontargeted injuries in Washington Heights to children aged 5 through 16 years.

incidence of severe injuries to children in Harlem. Such an evaluation is critically important for future planning of the program and, to the extent that the program is found to be successful, for facilitating sustained interest and support.

A major strength of this study is the use of Poisson regression to analyze injury rates over time, including periods before and during the intervention, adjusting for trends in the incidence rates that existed prior to the start of the prevention program. A simpler approach would have been to compare the mean annual incidence rates during the intervention period with those during the preintervention period. For example, for children younger than 5 years in Central Harlem the mean annual incidence rate was 28.4% lower during the intervention period than before (Table 2). The Poisson regression analysis shows a 6% increase (not statistically significant) in incidence for this age group during the intervention time period, after controlling for the annual decline in rates that occurred over the whole 9-year period. The regression approach provides a better way to detect changes likely to be due to the intervention rather than those associated with temporal variations in incidence that were present prior to the intervention. The Poisson regression approach could not be used to evaluate the impact of the program on injury fatalities because there were too few cases to produce stable quarterly mortality rates. It may be possible to use the approach in the future, using a larger control area and adding more years of data.

Another strength of this study is the use of multiple comparisons to assess the extent to which an observed reduction in injury incidence is specific to the age group, the area, and the types of causes targeted by the prevention program. The fact that these multiple comparisons gave mixed results indicates that more research is needed before a conclusion can be made about the effectiveness of the Safe Kids/Healthy Neighborhoods Coalition and injury prevention program. A simpler strategy might have provided results easier to interpret. For example, a strategy using no comparisons between age groups, areas, or causal categories would give results fully consistent with the hypothesized effectiveness of the program; a strategy using only the area comparison would support the conclusion of no measurable effect. The results of multiple comparisons have alerted us to the complexity of the temporal trends in pediatric injury incidence rates in Northern Manhattan and may have prevented us from drawing incorrect conclusions.

This study is limited to a relatively brief period of observation (3 years) following the start of the prevention program. Additional years of follow-up are needed to assess whether the decline persists and whether interventions only recently implemented have additional effect. Individual-level studies of associations between program involvement and exposure to program activities, on one hand, and injury incidence, on the other, will help to clarify the effect of the Safe Kids/Healthy Neighborhood Injury Prevention Program and its specific components on the risk of severe childhood injury in Central Harlem. These initial results are encouraging and suggest that the program is having a beneficial impact on the risk of severe injury to children in Harlem. □

Acknowledgments

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